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# Climate Wise Profiles: 1999 Partner Achievement Award Winners

This year Climate Wise is pleased to announce the 1999 Partnership Achievement Award. Achievement Awards are presented to 12 companies who excel in the areas of leadership, innovation, action planning, and actual results of increased energy efficiency, and emissions reductions. Three companies will receive special recognition awards for their accomplishments in individual projects.

Climate Wise, a unique government industry partnership sponsored by the U.S. Environmental Protection Agency (EPA) with technical support from the U.S. Department of Energy (DOE), helps businesses turn energy efficiency and environmental performance into a corporate asset. Since the program's launch in 1994, more than 530 companies have joined. These companies represent 13 percent of industrial energy use and expect, by the year 2000, to cut emissions by the equivalent of 18 million metric tons of carbon dioxide, and save \$600 million. Following is a list of the companies, from largest to smallest, that received awards followed by a brief description of their accomplishments.

#### **Award Criteria**

To receive an award, companies had to demonstrate excellence in all four of the following areas:

**Leadership:** Actions the company has taken to influence others to improve efficiency and enhance operation—both employees within the company and corporate peers.

**Innovation:** Actions that are unique or novel approaches to reducing greenhouse gas emissions and improving efficiency—innovations may be managerial or technical.

**Action Planning Excellence:** Actions that represent a comprehensive set of activities that improve efficiency and reduce emissions—including a focus on the most energy intensive processes or equipment.

**Results:** Quantifiable and credible estimate of the emissions reduced as a result of specific activities demonstrated through the Climate Wise Action Plan or the Voluntary Reporting of Green House gases report.

#### Multi-Facility Corporations with more than 10,000 Employees

### **Bethlehem Steel Corporation**

Since becoming Climate Wise's 400th partner in 1998, Bethlehem Steel has demonstrated a commitment to reducing costs while improving environmental performance. The company's action plan is comprised of nine primary project areas, ranging from process improvements requiring significant capital investment to projects requiring active employee participation. One particularly innovative practice is its intensified energy evaluation process, which utilizes a team of independent engineers and company personnel to identify cost and energy reduction opportunities. In addition, Bethlehem Steel is installing a more efficient cold rolling mill, upgrading electric furnace technologies, reducing steam consumption, and upgrading their combustion control and waste heat recovery systems. Savings from these and other actions are expected to total 1,019,938 metric tons of CO<sub>2</sub> and more than \$30 million in the year 2000.

### **IBM Corporation**

IBM, long recognized as a leader in the creation, development, and manufacture of advanced information technologies, is committed to energy efficiency. Since producing the first Energy Star®-marketed computer in 1993, energy-efficient equipment and processes have expanded across the firm's diverse product lines. The company's comprehensive approach to energy management is illustrated by its internal Environmental Impact Assessments, which are required when any process or product is initially designed or redesigned. Savings from Climate Wise actions are expected to total 272,160 metric tons of CO<sub>2</sub> in 2001 and more than \$5.5 million in the year 2000. IBM has also hosted its own Climate Wise partnership meeting, held a three-day Global IBM Energy Symposium, maintains a seat on the Tri-State Climate Wise steering committee, and has presented at the Armstrong International Energy Conference, and EPA's "Establishing Corporate Baselines and Tracking Reduction Projects" workshop, among other places.

### Johnson & Johnson

Johnson & Johnson, an international leader in health care products and related services, continues to work towards its goal of reducing energy use in the year 2000 by 25 percent of 1991 levels. To meet this goal, Johnson & Johnson has already reduced energy use by 20.2 percent in the U.S. and 19.9 percent internationally. Achievements have been credited to the implementation of their Best Management Practices, which addressed efficiency in a full range of end uses and utilized a new tracking database and internet-based utility data system to aid in evaluating energy reductions worldwide. A charter partner in Climate Wise, Green Lights, Energy Star Buildingssm, and the New Jersey Climate Wise Partnership, Johnson & Johnson has made presentations at many conferences and forums throughout the country which highlighted the benefits and results of its participation in these voluntary programs and encouraged others to join. Johnson & Johnson, an active World Wildlife Fund member, is a past winner of several awards including the Climate Wise Partner Achievement Award, Green Lights® Partner of the Year and Sustained Excellence Award, and Energy Star Buildings Upgrade of the Year Award.

#### Multi-Facility Corporations with less than 10,000 Employees

# **Coors Brewing Company**

Since joining Climate Wise in 1995, Coors has continued and expanded its many initiatives to reduce energy use. Recently, Coors helped upgrade and enhance a co-generation power plant, built by Coors and owned by Trigen-Nations. The plant now achieves almost a 60 percent thermal efficiency. This highly efficient co-generation system has served the plant and a nearby college by providing 400 kW of electric capacity. Coors also worked with the Trigen-Nations to install a backpressure generator that is generating .4 MW of electrical power while reducing steam pressure and temperature to usable levels at the Coors facility. Through a joint venture, Coors developed and uses ultraviolet-cured inks and coatings to print aluminum cans. This historic process is both less energy intensive and releases less VOCs than standard water-based inks and coatings. In addition, Coors has begun a process to distill unusable beer into fuel-grade alcohol, which can be blended with gasoline. This initiative averts six tractor-trailer trips of low-concentrate solution per day. Coors also purchases 25,000 kWh of wind-generated electricity each month from Public Service Company of Colorado's WindSource program, and is an active member of the Colorado Pollution Prevention Partnership and Governor's Challenge Program. The company anticipates continuous improvement in energy efficiency expects to reduce energy use by 1 percent in 2000.

#### EXTRA-LARGE FACILITY

# Bristol-Myers Squibb, Worldwide Clairol

The Stamford, Connecticut facility of Bristol-Myers Squibb houses the Worldwide Beauty Care Group's (WBCG) headquarters, research and development center, and manufacturing section which produced more than 400 million hair and skin care products in 1998. Worldwide Clairol, Matrix Essentials, and Redmond products comprise the WBCG. Worldwide Clairol has exhibited commitment to greenhouse gas reductions and exemplary leadership in sharing its experiences with other Connecticut companies. Worldwide Clairol spearheaded the formation of the Connecticut Climate Wise Partnership, recruited several leading Connecticut companies to join the program, hosted a workshop devoted to promoting the Climate Wise Program, and created a case study for use with prospective Climate Wise partners. Presently, Worldwide Clairol serves as a member of the Connecticut Partnership's steering committee and is working to recruit other Bristol-Myers Squibb facilities to the Climate Wise program. They also established the aggressive goal of reducing their 1999 energy use by 10 percent per unit of production below their 1998 baseline through an array of lighting, compressed air, process cooling, and production system optimizations. For the years 1998–2000, the Stamford facility expects reductions of 3,350,000 kWh/year and 1,089 metric tons of CO<sub>2</sub>/year resulting in energy cost savings of \$190,000.

### Cordis, Miami Lakes facility

Cordis, a Johnson & Johnson company, is the supplier of 70 percent of the diagnostic catheter market and a world leader in the manufacture of health care products. Since joining Climate Wise earlier this year, Cordis has become a leader in the Miami-Dade County, Florida community and has facilitated employee energy-efficiency education. The company began the Climate Wise program with the aim of fulfilling its commitment to reduce energy consumption by 20 percent over three years. In 1997, the company initiated lighting upgrades for all buildings and retrofits to the first two buildings resulted in savings of almost 150,000 kWh annually. It has also made significant improvements to its HVAC system, including replacement of inefficient air conditioners and chillers, installation of programmable thermostats, and implementation of an energy management system. Beyond facility improvements, motors and compressed air systems have been replaced reducing the energy demand of its manufacturing processes. To help Cordis evaluate and redesign the actual process, a student engineer has undertaken an analysis of the comprehensive energy requirements of each product. The company expects that these actions will reduce greenhouse gas emissions by more than 2,430 metric tons and save \$270,089 in the year 2000.

### Pratt & Whitney, North Berwick Facility (UTC)

Since joining Climate Wise less than one year ago, the North Berwick facility has emerged as a leader within the United Technologies Corporation (UTC), the state of Maine, and among Climate Wise partners. The first UTC facility to join the program, the North Berwick facility hosted a recent Climate Wise recognition event in Maine attended by the Governor, Angus King, and the state's first Climate Wise Network Forum. Pratt & Whitney has also created an environmental subcommittee devoted to energy reductions and related communications, contributed almost 400 hours and valuable feedback as beta testers of the Emissions Tracking Software, and successfully encouraged seven additional UTC facilities to join Climate Wise. Its action plan, which was delivered the same day the facility signed its partnership agreement, addressed almost one-half of all of Climate Wise's potential First Tier activities, including efficiency improvements in the plant's ceramic coating process and cooling tower operations. Its action plan documents 893 metric tons of CO<sub>2</sub> reduction and \$119,689 of savings for the year 2000.

#### LARGE CORPORATION OR FACILITY

### Miller Brewing Company, Milwaukee Brewery

The Milwaukee brewery of the Miller Brewing Company has energy saving projects throughout its 150-year history, but, in 1998, it embarked on a concentrated campaign to remain competitive with newer breweries. The campaign began with a baseline audit, and was quickly followed by a comprehensive energy management system. The system includes regular meter readings, a proactive system of detecting costly leaks, and any new activities suggested by the departmental energy action teams. Weekly energy audits, to seek new energy-saving opportunities and check progress against company targets, are performed by each department and by a member of senior management, on a rotating basis. The Miller Brewery Company projects emissions reductions of 18,133 metric tons with cost savings of \$1,847,270, in the year 2000. As a new Climate Wise Partner, the Milwaukee brewery hopes to share its successes with other Wisconsin businesses and to learn from the experiences of others in the years to come.

#### MEDIUM BUSINESS OR FACILITY

### Ajinomoto USA, Inc.

Backed by world-class capabilities in amino acid technology, Ajinomoto USA, Inc. is involved in the development and manufacture of pharmaceuticals, amino acids, and specialty chemicals. Ajinomoto USA, Inc. has 125 employees and is located in Raleigh, North Carolina. Since joining Climate Wise, Ajinomoto has undertaken several first-tier efficiency actions and has exhibited a commitment to the program's goals. In particular, Ajinomoto has experienced success with recovering and using landfill gas in a variety of applications at its facility. Additionally, Ajinomoto recently invested more than \$500,000 to refine a portion of its waste stream to sell as a high-nutrient animal feed. The City of Raleigh (NC) awarded them a pretreatment award for this project. Ajinomoto is also very involved in the community. In the past, they have co-hosted the Raleigh Climate Wise Forum, supported the Special Olympics, and provided for an on-site community-recycling center. Ajinomoto avoided 36,233 metric tons of CO<sub>2</sub> and saved \$673,343 in 1998.

# Fetzer Vineyards

Fetzer Vineyards, America's sixth largest premium wine producer and a global leader in organic grape growing, has established an active role in community environmental protection. In addition to past energy-efficiency measures, the company has committed to the use of renewable energy to reduce their greenhouse gas emissions. Fetzer recently entered into a three-year contract with PG&E Energy Services to meet 100 percent of its 5.4 million kWh annual electric use with renewable energy from small hydro, solar, wind, geothermal, and biomass sources. Additionally, a 40 kW photovoltaic array, generating approximately 62,000 kWh per year, supplies electricity to the company's administration building, while a 75 kW natural gas-powered cogeneration unit with a heat exchanger provides hot water and 15,000 kWh of electricity for the barrel production and washing operations. The company's waste reduction activities were also recognized with one of the ten statewide "Waste Reduction Awards of the Year" from the California Integrated Waste Management Board.

### Louisiana-Pacific Corporation, Tomahawk Operation

Louisiana-Pacific, a major building products company, manufacturers structural wood panels at its Tomahawk Operation in Wisconsin. Among its impressive energy-efficiency measures, a system-wide performance optimization project for wood drying cut energy use by 40 percent, saving 2.4 million kWh of electricity and almost 2,100 metric tons of CO<sub>2</sub>. The \$94,000 in savings resulted in a payoff period of less than 6 months. Similarly, improvements to the compressed air system saved the company about \$5,400 annually, an investment that paid off after only one month. Other projects have included insulation of the hot pond used for wood defrosting, reduction of waste heat through process optimization, and redirection of biomass heater exhaust to supplement the dryer system. The Tomahawk Operation actively promotes Climate Wise through its involvement with the Wisconsin Energy Bureau's Focus on Energy Program and has opened the facility for industrial training sessions and site tours.

#### SMALL BUSINESS OR FACILITY

### **Engelhard Hexcore**

Engelhard-Hexcore manufactures lightweight structural materials used in aircraft, boats, air conditioners, and sports equipment. The company is honored for both emissions reduction and community leadership. Engelhard installed electronic thermostats on all HVAC units, saving 32,000 kWh of electricity, and implemented a preventative maintenance program for ovens, motors, and other equipment, saving 1,909 MMBtu of gas and 838,416 kWh of electricity. Initiatives to encourage employee carpooling were also notably successful with a 15 percent increase in carpooling. These activities are expected to reduce CO<sub>2</sub> emissions by 683 metric tons, and save the company \$62,477, in the year 2000. The company has undertaken substantial waste reduction programs, and has exhibited leadership through environmental education in the workplace and participation in numerous regional workshops including the EPA Region IV Pollution Prevention Conference.

#### SPECIAL ACHIEVEMENT AWARD WINNERS

### **Branson Ultrasonics Corporation**

Branson Ultrasonics, a division of Emerson Electric Company, is an industry leader in the design, development, manufacture, and marketing of plastic joining and precision cleaning equipment. Since joining Climate Wise, the company has exhibited significant leadership, both in the program and the community. As the first partner in the Connecticut Climate Wise Partnership, Branson has been instrumental in recruiting other partners and establishing the Partnership's steering committee. As the fourth company in Connecticut to achieve independently reviewed ISO 14001 Environmental Management System status, Branson trained all of its employees to understand their role in environmental protection and pollution prevention within the company's environmental policy. Branson presented an energy conservation/Climate Wise overview to the Connecticut Business & Industry Association (CBIA), and received that organization's top environmental Award of Excellence in 1999. The company had previously been awarded the CBIA's Environmental Success Award of Honorable Mention in 1998, the Connecticut Department of Environmental Protection's Green Circle Award, and Emerson's President's Quality Award. Branson is currently dedicated to an improvement project for the Still River, which flows along company property. Branson's Climate Wise Action Plan includes such commitments as reducing hazardous waste per unit of production by 5 percent and energy by 3 percent over the present year and installing more efficient lighting in their facility. The company reduced electricity use by 38 percent and gas use by 66 percent from 1993 to 1998 and expects to save over \$15,100 in the year 2000.

#### **Essential Foods**

Over the past eleven years, Essential Foods has aimed to create delicious, organic, vegetarian foods in a way that treads lightly on the planet. Throughout its history, the company has tried to maximize its greenhouse gas reductions and has promoted environmental ideals and networking opportunities with other small businesses. Since joining the program, Essential Foods has exhibited leadership through promotion of Climate Wise in the Seattle area, opening the door to recruiting Starbucks Coffee Company as a new partner. In addition, Essential Foods presented its inventive program ideas at the University of Washington Business Forum for Social and Environmental Responsibility and at the Boeing Climate Wise Forum. The company has also adopted an array of innovative transportation and refrigeration initiatives, including the combination of existing delivery routes, the production of organic foods locally as an alternative to importation, and the replacement of traditional refrigerated trucks with light pickups and insulated, refreezable food transportation boxes. Essential Foods expects to reduce its electricity use by 35,000 kWh in the year 2000, saving \$1,000 and avoiding 120 metric tons of CO<sub>2</sub> emissions.

# TXI Corporation

TXI, the largest producer of cement in Texas and the second largest supplier of structural steel beams in North America, is recognized for its significant technical innovation. The company's patented CemStarSM process, which uses slag from the company's steel processes to bolster cement production, generates cost savings and extensive reductions in greenhouse gas emissions and carbon-based fuel usage. Since its inception in 1994, the CemStarSM process is estimated to have avoided 220,000 metric tons of CO<sub>2</sub> and 2,725,000 MMBtu. Using current production forecasts, approximately 68,000 metric tons of CO<sub>2</sub> and at least 55,000 MMBtu will be saved each year as a direct result of this innovation. In addition, TXI has licensed its patented process for use in at least eight other cement plants, further expanding the associated environmental benefits. Along with continued use of their CemStarSM process, TXI's Climate Wise Action Plan includes actions such as upgrading electrical equipment and the use of waste derived fuels. The company expects to reduce CO<sub>2</sub> emissions by more than 286,000 metric tons and save more than \$6,800,000 this year.